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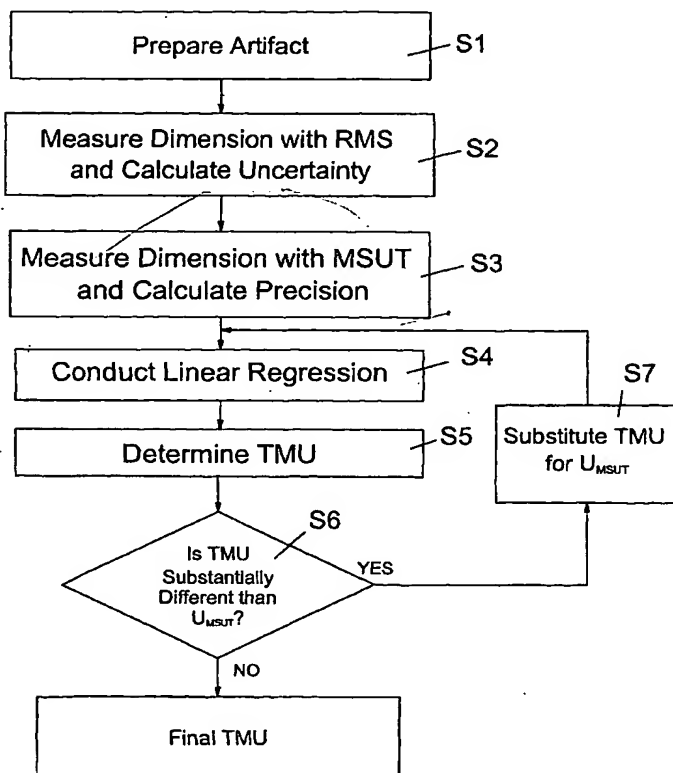
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- (71) Applicant (for all designated States except US): INTERNATIONAL BUSINESS MACHINES CORPORATION [US/US]; New Orchard Road, Armonk, NY 10504 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ARCHIE, Charles, N. [US/US]; 34 RAEMONT ROAD, GRANITE SPRINGS, NY 10527 (US). BANKE, JR. William, G. [US/US]; 4 Kiln Road, Essex Junction, VT 05452 (US).
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(54) Title: ASSESSMENT AND OPTIMIZATION FOR METROLOGY INSTRUMENT,



(57) Abstract: Methods and related program product for assessing and optimizing metrology instruments by determining a total measurement uncertainty (TMU) based on precision and accuracy. The TMU is calculated based on a linear regression analysis and removing a reference measuring system uncertainty (URMS) from a net residual error. The TMU provides an objective and more accurate representation of whether a measurement system under test has an ability to sense true product variation.

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